ABSTRACT OF THE DISCLOSURE

Mesoporous hexagonal, cubic, lamellar, wormhole, or cellular foam aluminosilicates, gallosilicates and titanosilicates derived from protozeolitic seeds using an ionic structure directing agent are described. The silicon and aluminum, gallium or titanium centers in the structures are stable so that the framework of the structure does not collapse when heated in the presence of water or water vapor (steam). The steam stable compositions can be used as catalysts for hydrocarbon conversions, including the fluidized bed catalytic cracking and the hydrocracking of petroleum oils, and other reactions of organic compounds.